

he unknown has always called to us. When Major John Wesley Powell entered into the vast and deep gorge we know today as the Grand Canyon, who could imagine the adventures, the sights, and the new discoveries that awaited them. Today, we are still planning and speculating. Each year, we load our boats and send an expedition down river to investigate the Colorado River, bringing back valuable information on plants and animals. For some, the prognosis is good; for others, they stand on the brink of extinction. The key to it all is the knowledge gathered by the members of the expedition.

The annual sixteen-day wildlife research expedition through Grand Canyon National Park is important to the park inventory and monitoring effort as it provides a means of observing and documenting the health and dynamics of species living in the canyon. These inventory and monitoring expeditions provide baseline data to researchers and staff so they can then make informed management decisions that will ensure the preservation and protection of species well into the future.

The Natural Resource Information Division (NRID) teamed up with the 2002 research expedition in Grand Canyon National Park to create a virtual experience that highlights the many aspects of researching wildlife in the rugged environment of the Grand Canyon.

Features

The virtual experience of the Grand Canyon research expedition was designed to show the public what is involved in planning and conducting a research trip, the types of data gathered, and what those data can tell resource managers about life in the canyon.

- Introduction
 - Watch a video that locates the Grand Canyon from outer space and shows highlights of the expedition while listening to music inspired by the canyon.
- Life in the Canyon
 - Discover background information on the environments within the Grand Canyon and how those environments have changed over time
- Purpose of the Expedition

 Learn the mportance of these expeditions.

The Colorado River has carved the Grand Canyon while winding its way through northern Arizona. Grand Canyon National Park was established in 1919 to protect this amazing feature. Today, researchers are learning how wildlife utilizes the environments in the canyon to ensure their protection for future generations.

"Stretching forever cut by a river

From the rim for nine
miles our nature unveils
A winding adventure
on Bright Angel Trail
It's the Grand One
It's the Grand
Canyon..."

— Jim Salestrom excerpt from the song "In the Grand Canyon"

Visit Views of the National Parks online at: www2.nature.nps.gov/synthesis/views

Use the research map to find out more about the research being conducted to preserve and protect the many unique species found in and around the Grand Canyon.



"It is the role of this wildlife research expedition, and other research endeavors, to determine just how wildlife is distributed throughout the Grand Canyon, how the canyon affects the distribution patterns, and how management actions can help ensure the preservation and protec tion of the life in Grand Canyon National Park."

> - Elaine Leslie Wildlife Biologist Grand Canyon National Park

Learn about the vast amount of effort that goes into planning an expedition like this one. Discover the planning, funding, and equipment needed for an expedition. Meet the research ers and crew members of the expedition as well.

· Research

Listen to scientists as they describe a more holistic ecosystem approach for inventory and monitoring of species in Grand Canyon National Park. Explore the wildlife studies and learn how and where the research is done.

Goals

Learn how information is gathered on research expeditions influences the writing of park management plans and help staff protect and preserve the many species within the park.

Challenge Your Understanding Test your understanding of wildlife expeditions in a series of activities, such as wordsearches, cross-word puzzles, decoder exercises, and mini-research projects.

Teacher Resources

The Teacher Guide for this virtual experience provides details on how teachers can incorporate this valuable information from the Grand Canyon into their curricula. The guide can be viewed on the computer or printed on paper. The National Teaching Standards resource has information about which science and social studies standards can be met using this virtual experience. The Activities resource contains the activities for students to complete. A

Resource CD (under development) provides the text and imagery used in the virtual experience, and also contains the answer keys to the activities.

Partners

The support, cooperation and collaboration of many people has made the development of this virtual experience possible. Many thanks to:

- · Grand Canyon National Park
- The Grand Canyon National Park Foundation
- Jim Salestrom, musician
- The researchers, boatmen, and volunteers that went on the expedition

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